

L35 ANSWER 193 OF 272 HCAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 1993:22625 HCAPLUS Full-text  
 DOCUMENT NUMBER: 118:22625  
 TITLE: Cyclopeptides, procedure for their preparation and  
 their use as medicine  
 INVENTOR(S): Schnorrenberg, Gerd; Palluk, Rainer; Heinrichs, Stefan  
 PATENT ASSIGNEE(S): Boehringer Ingelheim Kg, Germany  
 SOURCE: Ger. Offen., 20 pp.  
 CODEN: GWXXBX  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 4  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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DE 4032268	A1	19920416	DE 1990-4032268	19901011
CA 2089747	AA	19920412	CA 1991-2089747	19911010

WO 9206998 A1 19920430 WO 1991-EP1934 19911010  
W: AU, CA, CS, FI, HU, JP, KR, NO, PL, SU, US  
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, NL, SE  
AU 9187366 A1 19920520 AU 1991-87366 19911010  
EP 552238 A1 19930728 EP 1991-918322 19911010  
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE  
HU 63859 A2 19931028 HU 1993-1054 19911010  
JP 06501950 T2 19940303 JP 1991-516845 19911010  
PL 168456 B1 19960229 PL 1991-299317 19911010  
NO 9301341 A 19930407 NO 1993-1341 19930407  
PRIORITY APPLN. INFO.: DE 1990-4032268 A 19901011  
DE 1990-4032269 A 19901011  
DE 1990-4032271 A 19901011  
DE 1991-4117733 A 19910530  
WO 1991-EP1934 A 19911010

OTHER SOURCE(S): MARPAT 118:22625

GI For diagram(s), see printed CA Issue.

AB Cyclopeptides I [A = NH(CH<sub>2</sub>)<sub>n</sub>CO (n = 1-11; B, C = bond or α-amino acid residue; D = α-amino acid residue; E-F = Gly; E, F = α-amino acid residue, NH(CH<sub>2</sub>)<sub>2</sub>-11CO; G = α-amino acid residue; H = α-amino acid residue with 1 or 2 lipophilic side chains; I = bond or α-amino acid residue; K = α-amino acid residue; L = α-amino acid residue with 1 or 2 lipophilic side chains; M = Gly or α-amino acid residue] were prepared as atrial natriuretic peptide agonists. Thus, H-β-Ala-Phe-Arg(Mtr)-Phe-D-Ala-Gly-Arg(Mtr)-Ile-Asp(OCMe<sub>3</sub>)-Arg(Mtr)-Ile-Gly-polymer (Mtr = 4-methoxy-2,3,6- trimethylphenylsulfonyl) was prepared by the solid-phase method on a 2-methoxybenzyl ester resin using Nα-(9-fluorenylmethoxycarbonyl) amino acids. The above protected peptide was cleaved from the resin by 1% CF<sub>3</sub>CO<sub>2</sub>H in CH<sub>2</sub>Cl<sub>2</sub> for 10 min. at room temperature and the resulting product was cyclized by diphenylphosphoryl azide and then the side-chain blocking groups were cleaved by CF<sub>3</sub>CO<sub>2</sub>H/anisole (90/10) for 24 h at room temperature to give cyclopeptide II.

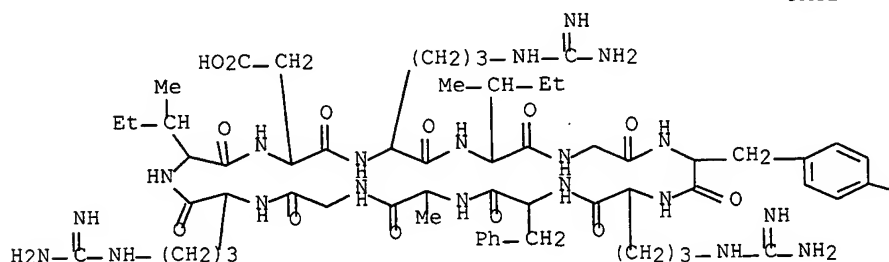
IT 143130-28-3P 143130-46-5P 143130-47-6P  
143130-48-7P 143130-49-8P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of, as atrial natriuretic peptide agonist)

RN 143130-28-3 HCAPLUS

CN Cyclo(D-alanylglycyl-L-arginyl-L-isoleucyl-L-α-aspartyl-L-arginyl-L-isoleucylglycyl-4-nitro-L-phenylalanyl-L-arginyl-L-phenylalanyl) (9CI)  
(CA INDEX NAME)

PAGE 1-A

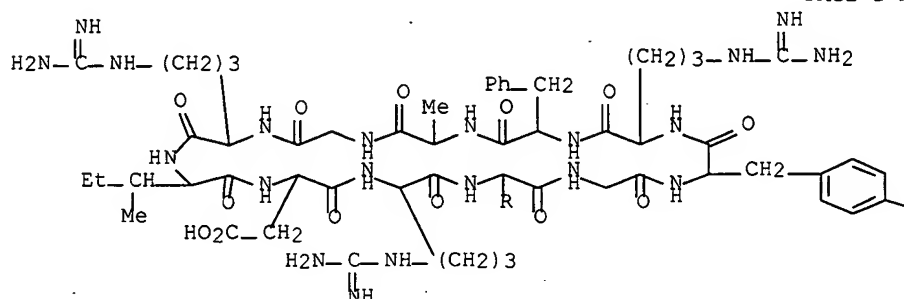


—NO<sub>2</sub>

RN 143130-46-5 HCAPLUS

CN Cyclo(D-alanylglycyl-L-arginyl-L-isoleucyl-L-α-aspartyl-L-arginyl-L-isoleucylglycyl-L-tyrosyl-L-arginyl-L-phenylalanyl) (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B

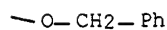
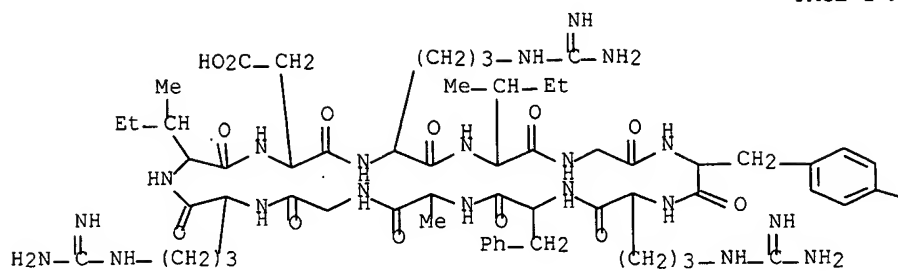
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PAGE 2-A



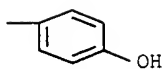
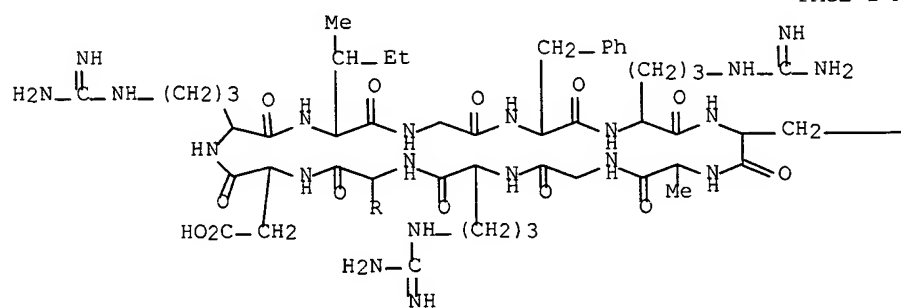
RN 143130-47-6 HCAPLUS

CN Cyclo[D-alanylglycyl-L-arginyl-L-isoleucyl-L-α-aspartyl-L-arginyl-L-isoleucylglycyl-O-(phenylmethyl)-L-tyrosyl-L-arginyl-L-phenylalanyl] (9CI) (CA INDEX NAME)



RN 143130-48-7 HCAPLUS

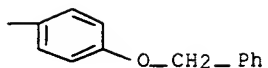
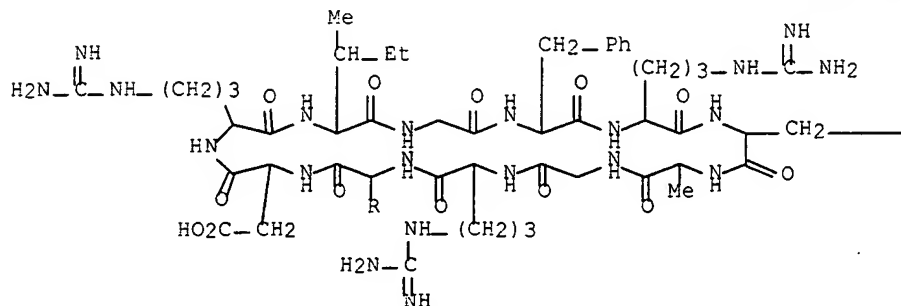
CN Cyclo(D-alanylglycyl-L-arginyl-L-isoleucyl-L-α-aspartyl-L-arginyl-L-isoleucylglycyl-L-phenylalanyl-L-arginyl-L-tyrosyl) (9CI) (CA INDEX NAME)





RN 143130-49-8 HCAPLUS

CN Cyclo[D-alanylglycyl-L-arginyl-L-isoleucyl-L-α-aspartyl-L-arginyl-L-isoleucylglycyl-L-phenylalanyl-L-arginyl-O-(phenylmethyl)-L-tyrosyl] (9CI)  
(CA INDEX NAME)



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